

Amendments to the Drawings:

The English language drawing sheet attached in connection with the above-identified application containing FIGS. 4 and 5 is being presented as a new formal drawing sheet to be substituted for the previously submitted drawing sheet. FIG. 4 has been amended as discussed in greater detail below. Appended to this amendment is an annotated copy of the previous drawing sheet which has been marked to show changes presented in the replacement sheet of the drawing.

FIG. 4 has been amended to include the label "PRIOR ART" as suggested by the Examiner on page 2 of the Office Action.

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

As a preliminary matter, Applicant notes the Office Action's consideration of the Information Disclosure Statement submitted on February 11, 2002.

The drawings stand objected to for a minor informality. Claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,889,596 to Yaguchi et al. (hereinafter "Yaguchi") in view of well known prior art.

By this amendment, the drawings have been amended to address the Examiner's concerns by FIG. 4 being designated with the label "PRIOR ART." Applicant respectfully submits that the drawings, as amended, are in proper form and requests withdrawal of the objection to the drawings. Claim 1 has been amended to further define the subject matter Applicant regards as the invention as discussed in greater detail below. New claims 10 and 11 have been added to the application and claims 2 and 3 remain unchanged.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier. After amending the claims as set forth above, claims 1-3 and 10-11 are now pending in this application for consideration.

Applicant respectfully submits that each of the independent claims is patentably distinguishable over the cited reference as required by § 103. Applicant further submits that the cited reference fails to disclose Applicant's claimed image reading apparatus wherein *a encoding process is a process to convert the read-out data into fixed-length codes in units of 2 x 2 pixels by a fixed-length encoding method* as required by amended independent claim 1. New independent claim 10 recites a similar feature in the context of a step in a method claim. By contrast, the cited reference fails to disclose, teach or suggest this claimed feature. Accordingly, independent claims 1 and 10 and claims dependent therefrom are patentably distinguishable over the cited reference. This distinction will be further described below.

THE CLAIMS DISTINGUISH OVER THE CITED REFERENCE

In the Office Action, claims 1-3 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Yaguchi and well known prior art. In response, Applicant respectfully traverses the rejections, relying on MPEP § 2143, which states that:

[t]o establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.¹

It is respectfully submitted that at least the first and third criteria of MPEP § 2143 have not been met in the Office Action.

The Cited Reference Does Not Suggest All Claim Recitations

Even if the first requirement of MPEP § 2143 was satisfied in the Office Action (which it is not, as explained below), the cited references still do not meet the third requirement, which is that “the prior art reference (or references when combined) must teach or suggest all the claim limitations.”

Embodiments of the present invention relate to an image reading apparatus. The image reading apparatus includes a feed section, a reading section, a storage section, a first control section and a second control section. The feed section feeds originals one by one and the reading section reads an image on an original fed from the feed section. The storage section stores image data read by the reading section and the first control section executes a control to feed the next original from the feed section, when the image data of the original has been stored in the storage section.

¹ In view of the United States Patent and Trademark Office guidelines promulgated since the U.S. Supreme Court handed down its ruling in *KSR International Co. v. Teleflex Inc.*, No. 04-1350, on April 30, 2007, these three requirements are still applicable to a rejection in view of 35 U.S.C. §103(a).

According to one embodiment of the present invention as now recited in independent claim 1, the second control section executes a control to read out the image data from the storage section and subjects the read-out data to an encoding process, *the encoding process being a process to convert the read-out data into fixed-length codes in units of 2 x 2 pixels by a fixed-length encoding method*, in parallel with the control by the first control section, and to store a result of the encoding process in the storage section. Support for the amendment to independent claim 1 can at least be found on page 22, line 24-26 of the present application.

With this feature, the time required for scanning and inputting documents can be reduced by reducing the amount of data recorded into the image memory and shortening the time for transferring data to the hard disk drive (see, Specification, page 2, lines 10-13 and page 22, line 26 through page 23, line 1). An exemplary embodiment of the present invention is illustrated in FIG. 3 which shows fixed length encoding section 32 receiving YMC signals (converted from RGB signals) by the conversion section 31. The fixed length encoding section 32 converts the image data represented by the YMC signals into fixed length codes in units of 2 x 2 pixels. The cited references fail to disclose this claimed feature.

The Yaguchi reference is directed to a reading unit of an image processing apparatus. The apparatus includes a reading unit, a compressing unit that compresses image data generated from the reading unit and a prediction unit that predicts a data amount after the compression for the image data. A control unit controls the reading of the document by the reading unit in accordance with a prediction result by the prediction unit. The Office Action correctly recognizes at page 3, that Yaguchi fails to disclose, teach or suggest, storing the results of the encoding process in the same storage section which stores image data read by the reading section. The Office Action then relies on what is believed to be known prior art to cure this deficiency. Applicant respectfully submits, however, that Yaguchi fails to disclose, teach or suggest *the encoding process being a process to convert the read-out data into fixed-length codes in units of 2 x 2 pixels by a fixed-length encoding method* as now

required by independent claim 1. At best, Yaguchi discloses comparing the image which is the same as the input image with a fixed length non-reversible compressing system such as JPEG (Column 11, line 68 through column 12, line 6). There is, however, simply no disclosure, teaching or suggestion of *the encoding process being a process to convert the read-out data into fixed-length codes in units of 2 x 2 pixels by a fixed-length encoding method* as now required by independent claim 1.

In addition, the Office Action correctly recognizes at page 3, that Yaguchi also fails to disclose a single storage section for both types of data. Yaguchi also does not suggest this feature, and the Office Action identifies nothing in Yaguchi to the contrary. Instead, the Office Action merely asserts that one of skill in the art would have known to employ a large enough memory. It appears that the Office Action relies on common knowledge in the art, as is discussed and permitted in MPEP § 2144.03, to satisfy the first requirement of MPEP § 2143. However, Applicant notes that MPEP § 2144.03 allows an applicant “to traverse such an assertion,” and that when an applicant does so, “the examiner should cite a reference in support of his or her position.” (MPEP § 2144.03, second paragraph.) Absent a citation by the PTO of a reference that can be evaluated for all its teachings, Applicant hereby traverses the assertion that it would have been common knowledge in the art that one of ordinary skill in the art would have known of the feature of claim 1. Applicant thus requests, relying on MPEP § 2144.03, that the PTO cite a reference and exactly identify where such a reference teaches the feature of claim 1, or else allow claim 1.

Accordingly, for each of the reasons stated above, the Yaguchi fails to meet the third requirement of MPEP § 2143 with respect to independent claim 1. Thus, independent claim 1 is allowable.

Since independent claim 1 is allowable, claims dependent therefrom, namely claims 2 and 3 are allowable by virtue of their direct or indirect dependence from allowable independent claim 1 and for containing other patentable features.

In sum, even if the first requirement of MPEP § 2143 is satisfied, the third requirement of MPEP § 2143 is not satisfied in the Office Action, since the cited reference

does not teach each and every element of the present invention. Thus, the present claims are allowable.

Lack of Suggestion or Motivation to Modify or Combine the Reference

The Office Action cites no rationale or motivation, to modify Yaguchi to arrive at the feature recited in independent claim 1. All that the Office Action asserts is that it is well known in the art to employ a large enough memory, such as a hard drive disk, to accommodate the various types of data (but does not provide any evidence of such knowledge, as discussed above). If a showing of obviousness could be established based on mere knowledge of various elements of a claim that are missing from a prior art reference, the first requirement of MPEP § 2143 would be completely eviscerated. Indeed, it is well established that innovation is often, if not usually, found in combining various elements of the prior art, hence the additional requirement to show motivation to combine/modify the prior art when rejecting a claim as obvious.

MPEP § 2143 states that “there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.” The recent guidelines promulgated by the PTO in view of *KSR International Co. v. Teleflex Inc.* (No. 04-1350, 2007) for rejecting claims as obvious are consistent with the first requirement of MPEP § 2143. Accordingly, the first requirement of MPEP § 2143 has not been met with respect to independent claim 1 for at least this reason.

In rejecting the claims, the Office Action appears to rely on the alleged ease by which Yaguchi may be modified, contrary to the procedures stipulated in the MPEP. The MPEP specifically states that the “mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination.” (MPEP § 2143.01, subsection 3, first sentence, citations omitted.) To the contrary, in Yaguchi’s device, memory 40 is used to store pages of original image data and memory 44 is used to store compressed image data. Thus, one of ordinary skill in the art would not have combined these two memory devices since these devices serve two different purposes. One memory device maintains the data in the original form while the other

memory device stores compressed data which is further edited (*see*, Column 6, lines 30-43). Combining the two memory devices would result in Yaguchi's system not working properly.

In summary, because of the lack of suggestion or motivation in the prior art to modify the reference, the first requirement of MPEP § 2143 has not been met and, hence, a *prima facie* case of obviousness has not been established.

Applicant respectfully submits that independent claim 1 and claims dependent therefrom are patentably distinguishable over the cited references and thus, allowable. Further remarks regarding the asserted relationship between any of the claims and the cited reference are not necessary in view of their allowability. Applicant's silence as to the Office Action's comments is not indicative of being in acquiescence to the stated grounds of rejection.

NEW CLAIMS

New claims 10 and 11 have been added to the application. New independent claim 10 is substantially similar in scope to independent claim 1 and includes the same patentable feature in the context of a step in a method claim. Thus, for the same reasons advanced above with respect to independent claim 1, independent claim 10 is also allowable. Dependent claim 11 is allowable by virtue of its dependence from allowable independent claim 10 and for containing other patentable features.

CONCLUSION

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated,

otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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